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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,894

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EXAMINER

CAMPBELL, MATTHEW T

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/783,894	<b>Applicant(s)</b> KUBLER ET AL.	
	<b>Examiner</b> MATTHEW CAMPBELL	<b>Art Unit</b> 2465	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 11 August 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 44-57, 59-63, 65-84 and 86-98 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-57, 59-63, 65-84 and 86-98 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8-11-2010 has been entered.

### ***Response to Arguments***

2. Applicant's arguments have been considered, but they are moot in view of the new rejection.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 63, 65-70 and 93-95 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 63 recites a machine-readable storage having stored thereon a computer program. One having ordinary skill in the art would interpret such machine-readable storage as including both statutory non-transitory storage as well as non-statutory transitory storage. Further, the specification does not state that the claimed storage

excludes transitory storage. Therefore, the claim is rejected as encompassing non-statutory subject matter. Claims 65-70 and 93-95 inherit this deficiency. It is recommended that applicant amend the claims to recite only non-transitory machine-readable storage. See Interim Examination Instructions for Evaluating Subject Matter Eligibility under 35 USC §101, August 2009, available here:

[http://www.uspto.gov/web/offices/pac/dapp/opla/2009-08-25\\_interim\\_101\\_instructions.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/2009-08-25_interim_101_instructions.pdf)

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 50-52, 77-79, 92, 95 and 98 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 50 and 77, in tandem with parent claims 44 and 71, recite "...the communication including the conversion of information received in a packet format for transmission in the associated format, and the conversion of information received in the associated format for transmission in the packet format, wherein the conversion of information received in a packet format for transmission in the associated format comprises buffering digitized voice information for a period of time to minimize gaps in a

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voice signal...wherein the at least one communication network is a second packet network"; however, the specification teaches that if setup assistance is not needed, the access device merely forwards the call setup packet to the destination device (**see fig. 59 and p. 299 lines 4-6**), and source and destination devices themselves generate voice packets (**p. 300 lines 8-12**). Thus, the specification does not teach the access device performing conversion between two packet networks. Claims 51, 52, 78 and 79 inherit this deficiency.

Claims 92, 95 and 98, in tandem with parent claims 90, 93 and 96, recite automatically determining the [buffering] period of time using propagation delay of the packet network, wherein the determining is performed during communication of voice, if the propagation delay of the packet network is above a certain level. However, the specification states that, during the communication of voice, queuing time may be adjusted merely by adjusting it up if a queuing time error is detected (**page 309, lines 11-17 and fig. 62**). The specification does describe using the propagation delay to determine the buffering period of time before voice communication begins (**page 306, lines 1-6 and fig. 61**), but the specification does not describe using the propagation delay to determine the buffering period of time during the communication of voice.

### ***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 44, 47-49, 53-61, 63, 64, 67-69, 71, 74-76 and 80-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isreal et al. (US 4723238 A) in view of Suffern et al. (US 5724413 A) and Barberis et al. (US 4317195 A).

For claim 44 and 71, Isreal teaches a method for communicatively coupling a packet network to at least one communication network having an associated information format, the method comprising: receiving, from one of the packet network and the at least one communication network, information requesting setup of a call between the packet network and the at least one communication network **(Isreal: network interface card 14 receives call originating from packet terminal 131-X or circuit terminal 121-X, fig. 1 and col. 3)**; and establishing call communication between the packet network and the at least one communication network based upon the information, the communication including the conversion of information received in a packet format for transmission in the associated format, and the conversion of information received in the associated format for transmission in a packet format **(Isreal: network interface controller 14 establishes communication path between packet terminal 131-X and circuit terminal 121-X using data converter 145X, fig. 1 and col. 3)**.

Isreal does not teach providing, to a host device, at least a portion of the information requesting setup of a call; receiving, from the host device, configuration information based upon the at least a portion of the information requesting setup of a call. However, Suffern from a similar field of endeavor teaches an interface card that provides received signals to the host device for processing **(Suffern: figs. 1-4)**. It would

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have been obvious to modify Isreal incorporate Suffern's teaching in order to reduce the cost of the interface card and to facilitate revision without requiring hardware modification.

Isreal in view of Suffern does not teach wherein the conversion of information received in a packet format for transmission in the associated format comprises buffering digitized voice information for a period of time to minimize gaps in a voice signal. However, Barberis teaches this **(see fig. 1 and col. 3 line 36: telecommunication system having packet-routing nodes for transmitting PCM voice signals; fig. 2 and col. 4 lines 7+: receiving node N2 having buffer memory M6 for temporary packet storage)**. It would have been obvious to one having ordinary skill in the art to modify Isreal and Suffern with Barberis' teaching to transmit voice without perceptible gaps **(see Barberis col. 1 lines 38-41 and the last lines of the abstract)**.

For claim 47 and 74, Isreal in view of Suffern and Barberis teaches the method of claim 44 and 71 wherein packets comprise digitized voice information **(Barberis: PCM voice signals, col. 3 line 40)**.

For claim 48 and 75, Isreal teaches the method of claim 44 and 71 wherein packets comprise non-voice data **(Isreal: Inter-system data calls, col. 9)**.

For claim 49 and 76, Isreal teaches the method of claim 48 and 75 wherein at least a portion of the non-voice data is unrelated to the communication of digitized voice information (**Isreal: Inter-system data calls, col. 9**).

For claim 53 and 80, Isreal in view of Suffern teaches the method of claim 44 and 71 wherein the at least one communication network comprises a conventional telephone switching network (**Isreal: CSS supports voice calls, col. 2 line 44; Suffern: telephone network 30, fig. 1**).

For claim 54 and 81, Isreal in view of Suffern teaches the method of claim 53 and 80 wherein the associated format is an analog format (**Suffern: telephone network 30 and analog converter 40, fig. 2**).

For claim 55 and 82, Isreal teaches the method of claim 53 and 80 wherein the associated information format is a digital format (**Isreal: CSS utilizes PCM voice samples or digital data, col. 4 line 49**).

For claim 56 and 83, Isreal in view of Suffern teaches the method of claim 53 and 80 wherein the associated format is a modem signal (**Suffern: modem signal, col. 4 line 10**).



For claim 57 and 84, Isreal in view of Suffern and Barberis teaches the method of claim 44 and 71 wherein the conversion of information received in a packet format for transmission in the associated format comprises converting digitized voice information into an analog voice signal **(Barberis: D/A convert DA, fig. 1)**.

For claim 58 and 85, Isreal in view of Suffern and Barberis teaches the method of claim 44 and 71 wherein the conversion of information received in a packet format for transmission in the associated format comprises buffering digitized voice information for a period of time to minimize gaps in a voice signal **(Barberis: buffer memory M6 temporarily stores incoming packets, fig. 2 and col. 4 line 7+, and col. 5 line 66+)**.

For claim 59 and 86, Isreal in view of Suffern and Barberis teaches the method of claim 44 and 71 wherein the conversion of information received in the associated format for transmission in the packet format comprises converting an analog voice signal into digitized voice information **(Barberis: A/D converter AD, fig. 1)**.

For claim 60 and 87, Isreal in view of Suffern and Barberis teaches the method of claim 44 and 71 wherein the at least one converter reduces the number of voice packets transmitted via the at least one packet network, by changing the packetization of digitized voice information when voice activity on the at least one network interface is below a predetermined level **(Barberis: talkspurt detector RVA determines absence of pauses, fig. 1 and col. 3 line 41+)**.

For claim 61 and 88, Isreal in view of Suffern teaches the method of claim 44 and 71 wherein the host device is a personal computer **(Suffern: conventional IBM computer 20, fig. 1)**.

For claim 63, Isreal teaches a machine-readable storage having stored thereon a computer program having a plurality of code sections for implementing a system supporting communication between a packet network and at least one other network, the at least one other network having an associated communication format, the code section executable by a machine for causing the machine to perform operations comprising: accepting a request for setup of a call, the request identifying the at least one other network **(Isreal: packet switching system 13 or circuit switching system 12 receives call originating from packet terminal 131-X or circuit terminal 121-X, fig. 1 and col. 3)**; providing, to a host device, information related to the call setup request; receiving, from the host device, call parameters derived from the information related to the call setup request **(Isreal: packet switching system 13 or circuit switching system 12 forwards request to network interface terminal 14, fig. 1 and col. 3)**; and communicatively coupling the packet network and the at least one other network, based upon the call parameters **(Isreal: network interface controller 14 establishes communication path between packet terminal 131-X and circuit terminal 121-X using data converter 145X, fig. 1 and col. 3)**.

For claim 64, Isreal teaches the machine-readable storage of claim 63 wherein the coupling comprises: converting information from a packet format to the associated communication format of the at least one other network; and transforming information from the associated communication format of the at least one other network to a packet format **(Isreal: data converters 145X convert between packet and circuit formats, col. 6 line 23).**

For claim 67, Isreal in view of Suffern teaches the machine-readable storage of claim 63 wherein the at least one other network comprises a conventional telephone switching network **(Isreal: CSS supports voice calls, col. 2 line 44; Suffern: telephone network 30, fig. 1).**

For claim 68, Isreal in view of Suffern teaches the machine-readable storage of claim 67 wherein the associated communication format of the at least one other network is an analog format **(Suffern: telephone network 30 and analog converter 40, fig. 2).**

For claim 69, Isreal in view of Suffern and Barberis teaches the machine-readable storage of claim 63 further comprising: communicating with the host device digitized voice information **(Barberis: PCM voice signals, col. 3 line 40; Suffern: exchange digitally-expressed analog sample amplitude values directly with the connected host computer, col. 2 lines 8-12).**

For claims 90, 93 and 96, Isreal in view of Suffern and Barberis teaches automatically determining the period of time using a propagation delay of the packet network, if the conversion comprises converting packetized digital voice information to a voice stream (**Barberis: col. 7 lines 32-40 and fig. 3 element 113**).

9. Claims 45, 46, 65, 66, 72 and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isreal et al. (US 4723238 A) in view of Suffern et al. (US 5724413 A), Barberis et al. (US 4317195 A) and Row et al. (US 5163131 A).

For claim 45 and 72, Isreal in view of Suffern and Barberis does not teach the method of claim 44 and 71 wherein the packet network is compliant with an Internet protocol (IP). However, Row teaches a packet network that is compliant with IP (**Row: TCP/IP, cols. 5 and 6**). It would have been obvious to one having ordinary skill in the art to modify Isreal in view of Suffern and Barberis with Row's teaching in order to interface with other IP networks.

For claim 46 and 73, Isreal in view of Suffer, Barberis and Row teaches the method of claim 45 and 72 wherein the Internet Protocol is compliant with the transmission control protocol (TCP)/Internet protocol (IP) (**Row: TCP/IP, cols. 5 and 6**).

For claim 65, Isreal in view of Suffern and Barberis does not teach the machine-readable storage of claim 63 wherein the packet format is compliant with an Internet

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protocol (IP). However, Row teaches a packet network that is compliant with IP (**Row: TCP/IP, cols. 5 and 6**). It would have been obvious to one having ordinary skill in the art to modify Isreal in view of Suffern and Barberis with Row's teaching in order to interface with other IP networks.

For claim 66, Isreal in view of Suffern, Barberis and Row teaches the machine-readable storage of claim 65 wherein the packet format is the transmission control protocol (TCP)/Internet protocol (IP) (**Row: TCP/IP, cols. 5 and 6**).

10. Claims 62, 70 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isreal et al. (US 4723238 A) in view of Suffern et al. (US 5724413 A), Barberis et al. (US 4317195 A) and Messenger (US 5046066 A).

For claim 62 and 89, Isreal in view of Suffern and Barberis does not teach the method of claim 44 and 71 wherein the packet network is a wireless network. However, Messenger teaches a wireless packet network (**Messenger: figs. 1-2**). It would have been obvious to one having ordinary skill in the art to modify Isreal in view of Suffern and Barberis with Messenger's teaching in order to provide mobile data nodes.

For claim 70, Isreal in view of Suffern and Barberis does not teach the machine-readable storage of claim 63 wherein the packet network is a wireless network. However, Messenger teaches a wireless packet network (**Messenger: figs. 1-2**). It

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would have been obvious to one having ordinary skill in the art to modify Isreal in view of Suffern and Barberis with Messenger's teaching in order to provide mobile data nodes.

11. Claims 91, 94 and 97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isreal et al. (US 4723238 A) in view of Suffern et al. (US 5724413 A), Barberis et al. (US 4317195 A) and Nishimoto (US 4549297 A).

For claims 91, 94 and 97, Isreal in view of Suffern and Barberis does not teach wherein the determining is performed before communication of voice begins. However, Nishimoto teaches wherein the determining is performed before communication begins **(measuring frame transmitted prior to the start of transmission to determine transmission delay time, col. 1 lines 54-60)**. It would have been obvious to one having ordinary skill in the art to modify Isreal in view of Suffern and Barberis with Nishimoto's teaching in order to apply the buffering time with the beginning of voice communication.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Suzuki et al. (US 4453247 A) provides teachings that are pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW CAMPBELL whose telephone number is 571-270-3988. The examiner can normally be reached on Monday through Friday from 9:00am until 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. C./  
Examiner, Art Unit 2465  
8-23-2010

/Jayanti K. Patel/  
Supervisory Patent Examiner, Art Unit 2465